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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,797	04/09/2004	Hiroyuki Shibaki	006453.P041	9095

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER

MOTSINGER, SEAN T

ART UNIT	PAPER NUMBER
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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,797	Applicant(s) SHIBAKI ET AL.	
	Examiner SEAN MOTSINGER	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/29/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Applicants Arguments/Amendments

Applicants arguments/amendments filed on 1/29/2009 have been entered and made of record.

Applicants Arguments with respect to 35 U.S.C. 102 with regard to claim 1 have been fully considered but are not persuasive.

The hybrid structure of Nicholson Inputs a bitmap image of a document and represents some of the words as PS objects (identifiable words) and some of the words it leaves as bitmap (unidentifiable words) objects. As described in paragraph 100 the bit map objects may be associated with "invisible word objects" which are displayed but normally invisible because the text and background are the same color and the bitmap image is displayed over the "invisible word objects." This is a method of hiding data in a PDF file such that the data is invisible when the image is being view but provides extra information (e.g. searchable text) to the computer using the file. This size of the invisible text object from is clear depiction of the "invisible word object" in figure 12a. Nicholson allows the user to view the "invisible text object" for the purposes of editing it as described in paragraphs 101-105. Figure 12 shows a depiction of the bitmap object 320 and the word object 318 (see paragraph 104). From the there relative size as compared to other words (i.e. the words "this is a") shown both windows and the contextual size of the surrounding words. It is abundantly clear that the low confidence invisible word object 318 and its original bitmap 320 are the same size.

Applicants argument on page 10 that the objects from claim 318 and 320 are displayed in different windows which represent different sizes is not persuasive because it is clear from the size of surrounding text and the context of the word that the "invisible word object" is in fact the same size as the bitmap object of that word. This is further clear from other highlighted words 316 and the size of surrounding words that these invisible word objects are also the intended to be the same size as their bitmap objects.

Rejections Under 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 9-11 rejected under 35 U.S.C. 102(b) as being anticipated by Nicholson et al
US 2002/0067859.

Re claim 1 Nicholson discloses An image processing apparatus comprising: an image attribute determining unit to determine an image attribute of an image data (detect identifiable objects see abstract); an object dividing unit to divide the image data into a plurality of objects based on the image attribute (detect identifiable objects see abstract); and an object describing unit to describe the objects in predetermined formats (non

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coded bitmap paragraph 100) and convert the objects into a file of a predetermined file format (PDF paragraph 100), wherein the object describing unit describes an object having a predetermined image attribute (unrecognizable word label, non coded bitmap paragraph 100) among the objects by associating an additional object (invisible text object paragraph 100) representing information on the predetermined image attribute with the object (text paragraph 100) with the object having the predetermined image attribute, wherein the additional objects are newly created objects (there is a newly created invisible word object and are displayed under the non coded bitmap objects) and include an object comprising an image pattern that indicates an additional object (text object paragraph 100), and an additional object object that brings the image pattern into and invisible state(same color as background so that they are invisible paragraph 100), wherein the additional object comprising the image pattern is equal in size to the object having the predetermined image attribute (Figure 12 shows a depiction of the bitmap object 320 and the word object 318 (see paragraph 104). From their relative size as compared to other words (i.e. the words "this is a") it is clear that the low confidence word object and its original bitmap 320 are the same size).

Re claim 9 Nicholson discloses wherein the predetermined file format is a portable document format (paragraph 100.)

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Re claim 10 claim 10 is the apparatus of claim 1 (see rejection for claim 1 further including a printer to print the document. Nicholson also discloses a printer (see paragraph 96)

Re claim 11, claim 11 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 1 (see rejection for claim 1.) Nicholson also uses a computer program (see paragraph 99)

Rejections under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-6, 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Coleman US 2003/0121007 in view of Nicholson et al US 2002/00678859.

Re claim 1 Coleman discloses An image processing apparatus comprising: an image attribute determining unit to determine an image attribute of an image data (see abstract object type); an object dividing unit to divide the image data into a plurality of objects (see abstract note the image is split into a plurality of objects) based on the image

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attribute (object type); and an object describing unit to describe the plurality of objects in predetermined formats (see paragraph 15 note the object must be described in some format) and convert the plurality objects into a file of a predetermined file format (PDL file see paragraph 15), wherein the object describing unit describes an object having a predetermined image attribute among the objects by associating an additional object (object descriptor paragraph 15 paragraph 47) representing information on the predetermined image attribute (printer independent quality characteristic paragraph 15) with the object having the predetermined image attribute.

Nicholson discloses wherein the additional object is a newly created objects other than the plurality of objects (invisible word objects paragraph 100) and includes an object comprising an image pattern that indicates an additional object (text object paragraph 100), and an object that brings the image pattern into an invisible state(same color as background so that they are invisible paragraph 100) and wherein the additional object comprising the image pattern is equal in size to the object having the predetermined image attribute (Figure 12 shows a depiction of the bitmap object 320 and the word object 318 (see paragraph 104). From their relative size as compared to other words (i.e. the words "this is a") it is clear that the low confidence word object and its original bitmap 320 are the same size). The motivation to combine is to (conform to a preexisting standard e.g. portable document format see paragraph 100).

Re claim 2 Coleman further describes further comprising a data converting unit (printer control device paragraph paragraph 16) to convert the file of the predetermined file

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format into a print instruction for a printer (printer dependent imaging actions paragraph 16) and output the print instruction to the printer, wherein the data converting unit identifies the object having the predetermined image attribute based on the additional object (printer independent quality characteristics paragraph 16), and performs an image processing to the object based on the predetermined image attribute (color transforms halftoning... paragraph 25).

Re claim 3 Coleman further discloses wherein when the object having the predetermined attribute is identified as an object having a text attribute (paragraph 33), the data converting unit performs a halftone processing with a higher sharpness to the object having the predetermined attribute (sharp edges, and choice of halftone paragraph 33), compared with an object having another attribute than the text attribute.

Re claim 5 Coleman further discloses when the object having the predetermined attribute is identified an object having a text (text paragraph 33) attribute with a white background, the data converting unit performs a halftone processing with a higher sharpness to the object having the predetermined attribute (sharp edges paragraph 33), compared with an object having other attribute than the text attribute with the white background.

Re claim 6 Coleman further discloses wherein when the object having the predetermined attribute is identified as an object having a text attribute with a color

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background, the data converting unit performs an identical halftone processing as that for the color background to the object having the predetermined attribute (note set of printer independent characteristics can be chosen including all objects treated the same this would result in both color text and background being the same see paragraph 24).

Re claim 9 Nicholson discloses wherein the predetermined file format is a portable document format (paragraph 100.)

Re claim 10 claim 10 is the apparatus of claim 1 (see rejection for claim 1 further including a printer to print the document. Coleman also discloses a printer (see paragraph 16)

Re claim 11, claim 11 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 1(see rejection for claim 1.) Coleman also uses a computer program (see paragraph 34).

Re claim 12 Claim 12 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 2(see rejection for claim 2.) further comprising outputting to a printer. Coleman also uses a computer program (see paragraph 34) and outputs to a printer see paragraph 16.

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colman and Nicholson in view of Amedei US 6,176,566.

Re claim 4 Coleman discloses all of the elements in claim 2 Coleman does not disclose wherein when the object having the predetermined attribute is identified as an object having a text attribute with an achromatic color, the data converting unit performs an image processing to enhance a black color in color correction and black color generation or an image processing to eliminate any remaining color of the object having the predetermined attribute. Amedei discloses wherein when the object having the predetermined attribute is identified as an object having a text attribute with an achromatic color (black and white text column 2 lines 10-20), the data converting unit performs an image processing to enhance a black color in color correction and black color generation or an image processing to eliminate any remaining color of the object (Removes color data column 2 lines 10-20) The motivation to combine is that the color is "undescribable" column 1 lines 44-50.

Conclusion

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN MOTSINGER whose telephone number is (571)270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571)272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bhavesh M Mehta/
Supervisory Patent Examiner, Art Unit 2624

Motsinger
4/25/2008